IN THE CLAIMS:

Please amend Claims 1, 20 and 21 as follows.

1. (Currently Amended) An image processing apparatus, comprising:

a) input means for inputting consecutive image data;

b) dividing means for dividing the image data into blocks each constituted of a plurality

of pixels;

c) detecting means for detecting a motion vector of each block;

d) judging means for classifying blocks into ~~one of~~ at least an object block, a background

block and a border block in accordance with a frequency of occurrence of the motion vectors

detected by said detecting means, the border blocks forming a boundary area between the object

blocks and the background blocks corresponding to a background area of an object; and

e) extracting means for setting an initial contour of the object in accordance with the

border blocks judged by said judging means, and extracting an object area using the set initial

contour and an active outline model.

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) An apparatus according to claim 1, wherein said judging means

judges a block from which the motion vector having a first largest occurrence frequency was

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detected, as the background block, and a block from which the motion vector having a second largest occurrence frequency was detected, as the object block.

5. (Original) An apparatus according to claim 4, wherein said judging means judges a block from which the motion vector having a third or more largest occurrence frequency was detected, as the border block.

6. (Previously Presented) An apparatus according to claim 1, wherein said judging means judges a block from which the motion vector having a first largest occurrence frequency was detected, as the background block, and a block from which the motion vector having a second or more largest occurrence frequency was detected and being adjacent to the background block, as the border block.

7. (Previously Presented) An apparatus according to claim 1, wherein said judging means judges a block from which the motion vector having a second largest occurrence frequency was detected, as the object block, and a block from which the motion vector having a first largest occurrence frequency was detected and being adjacent to the object block, as the border block.

8. (Previously Presented) An apparatus according to claim 4, wherein said judging means calculates similarity degrees of the motion vectors of the background and object blocks relative to the block from which the motion vector having a third or more largest occurrence frequency was detected, and re-classifies the block in accordance with the similarity degrees.

9. (Previously Presented) An apparatus according to claim 8, wherein the similarity degree is calculated from an inner product of motion vectors.

10. (Original) An apparatus according to claim 8, wherein the similarity degree is calculated from a distance between motion vectors.

11. (Previously Presented) An apparatus according to claim 1, wherein said judging means re-divides the block divided by said dividing means into second blocks and classifies the second blocks into one of an object block, a background block and a border block.

12. (Original) An apparatus according to claim 11, wherein said judging means re-divides the block from which the motion vector having a third or more largest occurrence frequency was detected, into the second blocks..

13. (Previously Presented) An apparatus according to claim 12, wherein said judging means re-divides a block from which the motion vector having a second largest occurrence frequency was detected and which is adjacent to the block from which the motion vector having a first largest occurrence frequency was detected, into the second blocks.

14. (Previously Presented) An apparatus according to claim 12, wherein said judging means re-divides a block from which the motion vector having a first largest occurrence

frequency was detected and which is adjacent to the block from which the motion vector having a second largest occurrence frequency was detected, into the second blocks.

15. (Previously Presented) An apparatus according to claim 1, further comprising encoding means for encoding the image data in the object area extracted by said extracting means.

16. (Original) An apparatus according to claim 15, wherein said encoding means encodes the image data in the background area.

17. (Original) An apparatus according to claim 15, further comprising transmitting means for transmitting the image data encoded by said encoding means.

18. (Original) An apparatus according to claim 15, further comprising recording means for recording the image data encoded by said encoding means in a storage medium.

19. (Cancelled)

20. (Currently Amended) A computer-readable storage medium storing program codes for causing a computer to perform image processing steps, the program codes comprising:

a) codes for an input step of inputting consecutive image data;

b) codes for a dividing step of dividing the image data into blocks each constituted of a plurality of pixels;

c) codes for a detecting step of detecting a motion vector of each block;

d) codes for a judging step of classifying blocks into ~~one of~~ <u>at least</u> an object block, a background block and a border block in accordance with a frequency of occurrence of the motion vectors detected by the detecting step, the border blocks forming a boundary area between the object blocks and the background blocks corresponding to a background area of an object; and

e) codes for an extracting step of setting an initial contour of the object in accordance with the border block judged in said judging step, and extracting an object area using the set initial contour and an active outline model.

21. (Currently Amended) An image processing apparatus, comprising:

a) an input unit, arranged to input consecutive image data;

b) a dividing unit, arranged to divide the image data into blocks each constituted of a plurality of pixels;

c) a detecting unit, arranged to detect a motion vector of each block;

d) a judging unit arranged to classify blocks into ~~one of~~ <u>at least</u> an object block, a background block and a border block in accordance with a frequency of occurrence of the motion vectors detected by said detecting unit, the border blocks forming a boundary area between the object blocks and the background blocks corresponding to a background area of an object; and

e) an extracting unit, arranged to set an initial contour of the object in accordance with the border block judged by said judging unit, and to extract an object area using the set initial contour and an active contour model.